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Anne Arundel, Md., Farming Lands.

Messrs. Editors American Farmer:

In your past issues I have read more than one description of certain portions of our State, giving glowing pictures of the advantages, agricultural and otherwise, of the localities described. This is right when truthfully stated (and I do not doubt a word I have read), for how else can those seeking a home in the country obtain such reliable information as they need to guide them in their inquiries?

Permit me to draw attention to a section that a few years since was famed as the home of those things deemed necessary to the enjoyment of life in the development of its highest manhood. 'Tis no less so now than in the past. The locality to which I refer is that portion of Anne Arundel county lying between the Patuxent river on the west and South river on the east—more particularly that portion of it known as the "Neighborhood of South River." This locality is, indeed, highly favored. The soil, a light sand directly upon the Patuxent, changes entirely about a mile from that river, becoming what is termed by some clay loam, and is of a texture and quality unsurpassed; free from stone or any impediment to the use of machinery; easily cultivated, and responding most generously to the efforts of the enterprising, energetic worker, giving yearly increase of crop and fertility of soil in proportion as he applies energy and intelligence to the development of the resources nature has so lavishly bestowed.

Within the past four or five years a spirit of enterprise has manifested itself in our neighborhood that has materially advanced it in every respect. The paralyzing effect of the war has passed away and life is vigorous and active everywhere; the fields that a few years ago were bare, unsightly and apparently barren, are green with heavy crops of grass and grain, and it is most pleasant to note the busy farmer as he exerts all his powers to place his corn and tobacco in a safe condition for the approaching harvest; and when his grain is reaped, the means of easy, economical transportation are at his command by sailing vessels and the steamers of the Maryland Steamboat Company that ply regularly between Baltimore and the many landings on South river.

We have good schools, churches, stores, mechanics of almost every kind, good health and many other good things to be thankful for, not the least of which, a most flourishing Grange—All Hallows, No. 4—in which are gathered the representative men and women of as noble a population of moral, intelligent people as can be readily found in this or any other state. No country offers greater inducements to the lover of country life; none more likely to realize the desire of the human heart—happiness.

June 4, 1884.

EDWIN A. DITTY.

[All who have seen the favored region, will agree with our correspondent as to its many agricultural and social advantages—*Eds.*]

Bolt Fences, Making Compost, &c.

Returning home about the middle of May after a month's sojourn in the city I found fences down, cattle running at large over the fields, a large quantity of wheat straw and corn fodder unconsumed and going to waste, and a general air of neglect and dilapidation.

The repair of fences first engaged my attention. I adopted the bolt system, as best suited to the old material upon the ground, to the skill of my operatives, and the limited time at command.

This fence is constructed in the following manner: A post is planted every ten feet, hewed down with the axe to about four inches in thickness; to this post is bolted on each side a rail of the same thickness of the post by a half-inch bolt nine inches long, following a hole rapidly bored with a half-inch brace bit; drive in the bolt and screw on the nut, and it cannot be thrown off by breachy cattle or blown up by wind or storm. Two rails bolted from the top down, of the height of an ordinary plank fence, with a less perfect rail nailed underneath, will make a perfect barrier or enclosure for cattle, horses and sheep. Hogs are not permitted to run at large in this neighborhood.

A bolt fence, erected by me several years ago on one side of a lane leading to my barn, has proved to be a perfect protection and enclosure, and has not cost a cent for repairs. For economy of material and construction, I consider it superior to plank and post and rail, or the newly-invented barbed wire.

Next for the straw and fodder: I ordered a carload of lime from the Messrs. Baker, of Buckeystown, Frederick county; set two hands to work gathering up the wasted corn stalks to form a foundation, and, with alternate layers of straw, fodder, lime, sods and rich earth to the height of 4 to 5 feet; have completed five or six 40x15 foot beds of compost, and await results. Gates and barn yet to receive the hand of repair and renovation.

I have a pair of large oxen too old to keep over, yet I cannot do without their services, so I am working them and feeding at the same time upon cut straw with rye chop, (pastured at night) and so far with very evident and satisfactory improvement.

One of my tenants, Mr. Uriah Griffith, lately removed from your custom house, took from my stable a small lot of fat steers, averaging 1,653 lbs., which were quickly taken at high figures by the export trade and sent across the ocean to feed the dainty palate of the subjects of her Majesty Queen Victoria. And since then, I see in the Baltimore Sun that my friend and neighbor, Col. Boyd, has sent from his large dairy, in this county, a venture of pure Alderney milk and cream to challenge, on the table of London connoisseurs, the production of the Channel Islands of Great Britain, and this, too, from land fifteen years ago covered with sedge and pine.

A. B. DAVIS.

Greenwood, June 10, 1884.

A COLONY of thirty families of Frenchmen, skilled in silk culture, is about settling in Moore County, North Carolina.

The Evils of Agricultural Specialties.

The daily papers tell us that the strawberry crop in the lower counties of the Eastern Shore, particularly in Wicomico, has been so large that the prices ruled very low, and the result has been disastrous to the growers, many of whom are plowing under their strawberry plants and putting in a late crop of corn to get something from their land and labor. This illustrates in a very striking manner the evils which I have recently endeavored to point out as sure to result from the practice of farmers, especially on the Peninsula, of rushing into specialties in perishable fruits and vegetables. These specialties in horticulture invariably result soon or late in disaster, and are always a curse to the farming interest and the improvement in agriculture. The writer knows Wicomico county well, and knows that what her agriculture needs more than anything else is forage and improved live stock. Very likely the men who rushed into strawberries and worked hard through the season only to find themselves if not losers at least very poorly paid, will have to buy corn fodder next winter at an exorbitant price or get timothy hay from the northward at a price which would pay the grower better than the best crop of strawberries. And yet there are swamp lands and "savannahs" in Wicomico county that ought to be growing more grass than three times the present stock of cattle could consume, to say nothing of the hay which even their most sandy uplands would produce with an intelligent rotation of crops. If the farmers of Wicomico had been content to give the strawberry only its proper proportion in the rotation of farm crops, that each farmer could manage with his regular force, instead of a vast over-production of inferior fruit which glut the market, they would probably have had superior fruit at good prices. The man who makes money in a suitable locality with strawberries or other "truck" crops is not the man who rushes headlong into a special crop and plows under his strawberries or pulls up his peach trees at the first disaster, but the one who never "loses his head," who quietly, year after year, gives the same portion of his attention to the various crops usually grown, and yet all the while makes his greatest effort to increase the product of each acre instead of increasing his acreage. I have no doubt that even this season there are some in Wicomico who, by reason of special care, had extra fruit and got good prices for their berries and made money. There are such men everywhere and the wonder is that more imitators are not found. A recent writer in the Baltimore Sun said in driving about Wicomico county he saw only few cultivators at work in corn fields, but hosts busy in the strawberry field; and next fall the traveller through Wicomico will see scanty stacks of corn-tops and blades scattered over the corn fields, carefully fenced off in pens from the hungry cattle that are compelled to keep alive on the stripped corn stalks and husks, all through the winter until the "hollow horn" (stomach) decimates them in spring. And all through

this same winter the store keepers in every village will be selling butter from the North at prices which would make a dairyman's fortune. And yet Wicomico has plenty of perennial streams, a mild climate and first-class transportation facilities, and with the growth of abundant forage crops the winter dairy as a prominent part of a mixed husbandry ought to be very profitable. The growing of strawberries or any other crop as a specialty to the neglect of proper farm rotation will never restore her barren fields or add permanently to her wealth. Only by an intelligent course of mixed farming in which the growth of grasses takes a prominent place can her sandy uplands be made fertile and her swamps be made to feed bees instead of mosquitoes.

W. F. MASSEY.

A Woman's Farming.

A lady, who writes as follows to THE AMERICAN FARMER, shows what a woman may do by energy and business-like ways in erecting and maintaining a country home and a business which gives her a comfortable and independent support:

I am one of the women who have to take care of themselves. In dividing my father's farm I got the house, some outbuildings and about four acres of ground—yard, garden and small orchard. That was three years ago this spring. By buying about eight acres more from the other heirs and having five years to pay for it, gives me four good-sized lots, with plenty of good water that never fails. I had a horse that I bought from the other heirs, having an interest in it, and a heifer that was fresh that year. The buildings, all but the hen-house, wanted repairing. I have paid on my land and am now ready to have some of the repairing done, as soon as the carpenter comes to do it, and, supporting myself comfortably, paid nearly all my doctor's bills, and one for one of my brothers—the latter going on the land payment. I raise my own meat, and this fall expect to have pork to sell. I raised my own bread. The doctor's bill I paid in fruit, both green and dried. I can sell every bit of fruit I dry at a better price than to sell it green. Sell vinegar, and with my eggs and butter make a better living than some others that have things a great deal better. All my neighbors, with but one exception, have been kind to me in a great many little ways.

It is true I have to work right hard sometimes, and do a little of man's work, but I do not know that I am worse off by it. It is my home, and no other place ever would be the same to me, and I think a woman had better live as I do than be dependent on others for her support, or be pushed from pillar to post.

I have bees, and so far this year have been fortunate with my swarms. Kept three stands through the winter, two old, one young. Two have swarmed, the other will in a few days. I do my own hiving generally, but if they go up on trees have to get some one to do it for me, but it is not often that happens.

I think if I can live as comfortably as I do

just where it has pleased God to place me, I do not see why others cannot. I do not think work ever hurt any one, or living within his means either. I love a farm and everything on it, and am devoted to flowers. I had a great many and made a large pit, nearly all by myself, but two winters ago lost most of them while I was sick. I still have a great many different kinds of hardy flowers and have almost a continuous bloom from early spring until frost.

I like the FARMER and would hate to do without it.

Improved Methods on the Farm.

There are very few farms in this country, East or West, that have ever been made to produce over fifty per cent. of their capacity, and very few farmers capable of making even 100 acres do more than this. A vast majority of those who own more would be benefited by selling the surplus and using the proceeds as a capital to improve the remaining acres, and by purchasing better stock.

The little Island of Jersey is said to maintain one animal to every two acres on the Island, including roads, fences and the ground occupied by buildings. Their farms average about 10 acres. In a very few instances in this country one animal has been supported to each improved acre. This proves what is possible under the best management. The best talent, the intensest study, the most knowledge and the best business methods should be, and will be devoted to agriculture for years to come. The professions are overstocked. Doctors are without patients and lawyers without clients, as most of them ought to be; but good lands are cheap and plenty. Intelligent laborers on the farm are scarce and better paid than any other class. Farming has been accepted as a last resort for these unable to live by their wits, or good enough for such as were considered incapable of or indifferent to thorough culture. The mentally active boy has taken a medical course or a law course of lectures after "completing his education" at the academy or college. These avenues are now full to repletion. They are in great need of thorough drainage. Now that farmers begin to see that they need more culture, more knowledge and better business methods to attain any standing in their own business, and to fill creditably such public stations as their numbers and their occupations entitle them, let them win back their sons from the shop and office to their farms, where all their intelligence can be more profitably employed. Let them send their sons to the agricultural college instead of the medical school; let them attend a course of lectures on botany and chemistry instead of law, and they may possibly do something to make farming more attractive as well as profitable, and take and hold that station in life to which the poet's fancy has assigned them.—*Cor. Breeder's Gazette.*

The Yellow Tobacco of North Carolina and Virginia.

Major R. L. Ragland, of Halifax county, Va., contributes the following on this subject to the Raleigh (N. C.) Chronicle:

The history of yellow tobacco dates back to a period immediately subsequent to the war of 1812-14. Previous to that time the dark export type, reeking with nicotine and creosote, was the type in demand by foreign markets where the entire crop went, except the small portion used for home consumption. To meet a demand from the French, who are fastidious in taste and epicures in everything, a new type was produced, the yellow piebald mottled type, which was much sought after by shippers to that Government, and at prices largely in excess of those paid for the old dark type.

This "French tobacco" was grown on gray, fresh soil, and the process of curing

was to commence with small fires under the tobacco and continue till the leaf was properly yellowed, and then to increase the fires and cure as yellow as it was possible with open wood fires. The manufacture of tobacco commencing about this time, the milder, brighter, types came more in demand for that purpose, and planters vied with each other in raising the best colored, sweet and mild tobaccos.

COAL CURING.

The most careful and scrutinizing inquiry has failed to find out the individual who first used charcoal in curing tobacco; but it is generally conceded that he was a North Carolinian and Caswell county his home. The honor lies between Captain Abishai Slade and Mr. William Long, both men of marked sagacity, energy and success in tobacco planting. In an article on this subject written some ten years ago, the date fixed was 1826, but subsequent investigation has convinced the writer that 1824 inaugurated the coal-curing process.

FLUE-CURING.

Dr. Davis G. Tuck, of Halifax county, Va., was the first to use flues in curing tobacco, and was granted a patent therefor in 1829. To Dr. Tuck also belongs the honor of introducing the thermometer as a guide in the curing process. The plan of the Tuck flue was a large single furnace, the mouth of which opened inside of the barn, and the furnace terminating in a chimney on the outside.

The defective construction of this flue caused many of them to burst and burn the barns, and consequently they never came into general use. The writer remembers the bursting of one on his father's premises in the year 1831, and the narrow escape of the burning of the barn. The bursting of the thermometers came afterward with less dangerous consequences.

BENEFACTORS.

The pioneers of this great industry—Slade, Long and Tuck—have all passed from the stage of action, but their names should never be forgotten while tobacco is planted and "Brights" hold the lead of all other types.

The first two, Messrs. Slade and Long, lived honorable and useful lives and died amidst the scene of their profitable labors.

Dr. Tuck moved to Christian county, Kentucky, where he accumulated a handsome property and died honored and beloved in the home of his adoption.

These men were benefactors, and deserve monuments to perpetuate their memory. Others, possibly equally deserving might be included in the sketch, but I am admonished to be brief.

Up to the year 1850 the production of yellow tobacco was confined to very narrow limits, mostly in the counties of Caswell, North Carolina, and Pittsylvania, in Virginia.

Captain Abishai Slade was invited to Cluster Springs in Halifax county, Virginia, in the summer of 1850, to meet a number of planters by appointment and instruct them in the mode of coal-curing yellow tobacco.

The writer, then a resident of the State of Mississippi, was present on that occasion and listened with deep interest to the plain, lucid and enthusiastic talk of Captain Slade. This dated the commencement of the coal-curing process in Halifax county, Virginia. The earliest clear specific essay on coal-curing was from the pen of Captain Slade, and published in the *Southern Planter*.

From 1850 to 1860 the production of yellow tobacco greatly extended, especially in Caswell county and in those surrounding; still, comparatively none of the yellow type was produced in Granville and other counties, now noted for the best tobacco lands and most skillful planters in the world.

It is claimed for Mr. Dennis Tilley, that he is the pioneer or certainly one of the first in coal-curing tobacco in Granville county—

1861. The flue-curing process, never successful till since the war, was revived and gave a wonderful impetus to the production of this most profitable type of tobacco, which has carried hope and prosperity wherever introduced on congenial soil. The improvement in the construction of flues has been so great, and the flue process so vastly superior to the old charcoal flue, that the flue has come into general use, superseding the use of coal.

For the curing of any type of tobacco where artificial heat is employed, the flue is the best and safest mode to apply it, and will soon supersede all other modes.

Exhaustive articles on culture, curing and management have been published from time to time, and the art of curing reduced as far as possible to a science. In this connection I hope I may be pardoned for alluding to an essay on yellow tobacco, first published in 1871, which has gone through seven editions. It was the first systematic attempt to give a minute description of the production of yellow tobacco "from the plant-bed to the warehouse." This essay, in describing the effects of too much or too little heat in fixing the color, never before done in any other work, was instrumental in teaching more people to cure tobacco than had ever been done by any other means. The author learned to cure yellow tobacco from taking Captain Slade's essay as his guide; but Captain Slade's article did not tell him the effects of too much or too little heat in fixing the color, and how this may be known by the peculiar appearance of the leaf at this critical stage, nor did he learn it until several barns of fine tobacco had been spoiled in curing. Without such knowledge there can be no system in the mode of curing; learning it, is to acquire the art.

The improvement of old varieties and the introduction of new ones specially suited to this type have, along with improved barns, better culture, heavier manuring, nicer management and more careful handling, all operated in producing the prettiest, healthiest and best type of tobacco to be found. And the world is finding this out, as is shown by the product never meeting the demand, and the spirited contest over all of the fine yellow tobacco in all of the markets at big prices.

WHAT IT HAS DONE AND IS STILL DOING.

Twenty-five years ago, some of the poorest regions in what now constitute the yellow tobacco belt of North Carolina and Virginia, offered a scant living to the poor inhabitants dwelling in huts amid uninviting surroundings. But yellow tobacco came, and lo! what a change! The log houses have given place to neat and substantial, comfortable dwellings; commodious school houses and imposing churches erected; the very face of nature and all of the surroundings changed, bettered and beautified. Then, too, see how wonderfully metamorphosed are the towns in the favored belt! Villages have been transformed into towns and towns into cities, with all that wealth, culture and enterprise can impart. And then remember, that yellow tobacco did this, and speedily too.

The extension and prosperity of this industry in the past decade has been phenomenal, and far exceeds in profits any other farming interest anywhere, in any country, and I dare say in any time.

Its possibilities no one can compass, for it is still extending, carrying thrift, enterprise and progress in its train.

Millet, or Hungarian Grass.

The time is right here for those who desire to seed millet, to give it immediate attention, as the crop should be in not later than the 20th of this month. And we think that it would be to the profit of every farmer to have a patch of it. We are aware that it is not generally popular, but why, we have never heard it ex-

plained. It is not intended to absorb such an extent of land as to trench upon that intended for more important crops. A few acres—two or three—could certainly be grown to good advantage in the feeding of cattle, whether in the green or dry state. Cattle are fond of it and it is quite nutritious. For fodder it should be cut before it is ripe, in fact while perfectly green. It should be first used in a green state, and what is left should be cured and housed as hay. It comes in very opportunely where pastures fail for want of rain, as it stands drought very well. Any land that will grow Indian corn will do for millet. It will take from four to five pecks of seed to the acre, and should be sown, as we suggest above, not later than the 20th of June. Farmers who have never tried this crop, are recommended to give it a trial now, at least on a small scale.

As we have stated on several occasions, if only a quarter of an acre of ground can be spared, it should be sown to millet if for no other purpose than for attracting the redbird, one of the most delicious of all our game birds. Preferring the millet seed to all others, not excepting even rice, it will seek out a patch of it almost in any locality in the Middle States. If sown where there is some cover for the gunner, as well as a couple of trees for the birds to light on, which they will sometimes do in large numbers, it will admit of several being brought down at a single discharge. We have known of several persons who regularly grew a small plot of millet for this purpose only, selecting a particular place, from which they supplied their tables and the tables of two or three of their friends with this much coveted bird, throughout the month of September and the first ten days in October. This is a hint we desire to repeat, for the reason that we think it more thoughtlessness than an indisposition to provide so fine a delicacy for the table, while at the same time any remnant of the crop can be applied to useful purposes.—*Germanston Telegraph.*

Selection and Care of a Grindstone.

Do not get old, rude, unpolished stones, but get a good, reliable one, with the improvements of the day upon it. The time was when it required two men and a boy to grind an axe. Now the boy alone can do it. A little self-adjusting machinery, with friction wheels and treadle, comprise his help. When buying a stone get one with an automatic sickle-grinder. Its cost is but slightly greater, and its use will save you many times its cost. A dull sickle causes needless wear and tear of machinery and a useless expenditure of animal strength. It does not pay to work with any kind of dull tools. To keep my grindstone in repair and good working order, I observe the following: I never grind a greasy tool without first removing the grease. This can be done in several ways. My way, after removing most of it with a stick or cob, is to use sand-paper or emery cloth. I hold the tool when I am grinding, so that it will wear both sides of the circumference of the stone uniformly. It spoils a stone to wear it hollow. I try to keep the stone as nearly round as possible. If one side wears down faster than the other, I know it is not a first-class stone, and that it must be rectified. A grindstone should be rectified once a year. To do this, take it out of the frame, but not off the shaft. By means of a pair of compasses or a scratch-awl and string, one end of which is held upon the end of the shaft and the other upon the stone at its shortest radius, describe a circle. Replace in the frame and, with chisel and gouge, remove all stone outside the circle. Exercise care that you do not chip off the corners. Unless a stone becomes very much one-sided the above operation is not necessary. I remove all flinty places with a hard, sharp-pointed instrument, and never allow

my grindstone, to stand in the rain or sunshine, but at all times keep them in the barn or other sheltered place. Not only the frame, but the stone as well, is injured by not being protected. I never allow the lower edge of my stones to stand in water, as a great many do, by having troughs beneath them. Being continually in water causes the stone to become soft. If you use a trough, see that the water is lowered beneath the edge of your stone after being used. Before grinding a rusty tool I see that most of the oxide is removed. If allowed to remain, it obstructs the grit and cutting power of the stone. In buying a stone, remember that the larger it is the easier it will run and the longer it will last. You cannot use a treadle upon a small stone. Keep the frame upon a level floor, and it will turn more easily.—*English Paper.*

Live Stock.

Live Stock.

By B. PURYEAR, LL. D., Professor of Chemistry in Richmond College.

Our late articles on green manuring suggest the kindred topic of live stock. Our farmers should pay more attention than they do to raising cattle and other domestic animals. Such a policy is favorable to the improvement of their lands, to the increase of their profits, and to the diminution of that exhaustive worry and anxiety which are connected with the matter of labor. The farmer should seek to sell, not as much, but as little as possible, from the direct yield of the soil. His crops are, in the main, converted into flesh at one time or another, and the profits of this conversion belong legitimately to him. Let him raise the grasses more extensively, and wheat as subsidiary to the grasses; and sell all his corn and provender of every sort in the shape of pork and beef. Certain sections of Virginia and Maryland are particularly favorable to this course; but we are certain that it can be followed, to a larger extent than now obtains, almost everywhere.

What considerations recommend this course? We answer: The exhaustion of the land is much less. The solid and liquid excrements of the animals are returned to the soil. Where thousands of pounds under a different system are sold directly from the yield of the soil, only hundreds under this are sold in the shape of meat. The gain to the soil is immense. A little closer inspection of the matter will show that the gain is even greater than is indicated by the foregoing statements. When we sell a beef, we sell only his flesh and bones. Of his flesh, 75 per cent. is water; a large part of his flesh is, or ought to be, fat; the remainder is nervous matter, muscles and bones. The removal of the water needs no comment, and the removal of the fat hardly more. Fat is a compound of carbon, hydrogen and oxygen, and plants obtain their carbon chiefly from the carbonic acid of the atmosphere, and their hydrogen and oxygen, in the form of water, from the clouds. The soil is injured only by the removal of nerves, muscles and bones, which constitute but a small part of the weight of the animal. For the formation of bones the plant takes from the soil chiefly phosphoric acid in combination with lime; and for the formation of muscles, nerves and the gelatin of bones, the plant demands ammoniacal compounds, existing in, or applied to, the soil, but furnished also, to some extent, by the free ammonia of the atmosphere. The removal therefore of the water and fat of animals works no injury at all to the soil; while the removal of bones and the vitalized tissues is partly at the expense of the atmosphere and partly at the expense of the soil.

The depasturing of land by adult animals works no injury to the soil at all, provided it receives their droppings. The largest part

of their food consists of hydro-carbons, which the plant has condensed from the water and carbonic acid of the atmosphere, while the amount of mineral matter and nitrogenous compounds, voided in their excrements, is precisely equal to the amount of such material daily assimilated from their food. It is different, however, when land is depastured by young animals and also by milch cows. The growing animal is adding to its muscles and bones daily, and therefore voids less of nitrogenous and mineral matter than he assimilates from his food, and the soil is the sufferer by the difference. So exactly with milch cows. The soil is the sufferer by all the mineral constituents, about one per cent. carried off in the milk, and the chief sufferer by the casein, or nitrogenous compound, of the milk, constituting about five per cent. or less of its weight.

It is obvious from the foregoing remarks that in raising animals for the shambles, we are putting the least possible strain upon the soil. Their bony skeletons and their nerves and muscles, when desiccated, constitute a small part of their weight; and of this small part, the soil furnishes less than half. The temptation is strong to go into an exact calculation; but I must forbear at present, and will perhaps attempt it at another time.

Compare this treatment of the soil with that drastic process which removes for market all the grain, grass, cotton and tobacco grown upon it. The exhaustion of the soil, both in organic and mineral matter, is fearfully rapid; and without heavy fertilization or frequent resting years for green manuring, hopeless infertility is the result.

It is the part of a wise and judicious farmer to pursue such a course that the productive capacity of his fields shall increase and not diminish. The improvement of his property is a large part of his profits and a larger part of his happiness. To know that his land has steadily improved all during his ownership; that it will descend to his children vastly more valuable from his skillful management; will afford a purer happiness than barns crowded with plenty. His farm attests and perpetuates his virtues and his wisdom. The drained marsh, the neat and fertile fields will keep his memory green, when those whom he loved in life have succeeded to the goodly heritage.

In other respect, there is a great advantage to the soil. Under the policy advocated, the land is plowed much less, and becomes thickly turfed. The land is not washed, therefore, by heavy rains, and decaying vegetation beneath the surface is not wasted by frequent stirrings and exposure to the hot sun of summer.

We believe then that raising stock for market is a prime factor in the process of soil recuperation. While the demands on the soil are far less heavy, the means of making manures are vastly increased. Vegetation of every sort, however worthless otherwise, can be utilized by putting it into the stalls and farm pens, where it is cut and reduced by the feet of the animals and mixed with their solid and liquid excrements. Immense quantities of putrescent manures can be made for maintaining and increasing the fertility of the soil. Thus is stopped, to a large extent, and, at length, completely, that terrific drain upon the profits of farming—commercial fertilizers.

The Best Stock the Cheapest.

It may be laid down as the first rule—a foundation principle—that the very best and purest stock that is really adapted to the end in view, should be sought after. It costs even less to feed a horse of good blood and lineage than it does to maintain a scrub; it costs no more to shelter him; it costs less to groom him and keep him in condition than it does to keep the scrub from looking like a scarecrow. His movement is almost in-

variably smoother and steadier for the same rate of speed; his temper is generally better, his pluck and energy not less so, and if it is found necessary to put him upon the market he brings a better price. The service of a stallion known to be of good blood, and possessing adequate powers of transmission, must, of course, cost more. There must be a dam adapted to the obtaining of a foal of the best type possible from such a sire; but the penny-wise pound-foolish policy of refusing to avail one's self of these advantages when in the bounds of possibility, is too apparent. Taking it for granted, then, that the best in this case is always the cheapest, that the finer and purer the horse can be, other things being equal, the more useful, more easily maintained, and more marketable he is bound to be, it remains to consider some points that must always be regarded by the intelligent breeder, who seeks wisely to adjust means to ends rather than to trust to chance.—*Farm, Field and Fireside.*

Special Blood Values in Breeding.

COOMASSIE AND HER FAMILY.

"Hark Comstock" contributes the following to the *Country Gentleman*:

Already the fresh cows are receiving preliminary tests to ascertain their promise of a high mark on June grass. Before the most favorable part of the season is passed, we wish to call attention to the greater appreciation that was in general shown by buyers at the late sales for tests of a longer period than a week—and the longer, up to a full season, the better. The great week usually indicates ability to make a great month, but neither appears to be accepted as proof positive of power to carry out a great yield for a season, especially with the accompanying requirement of a calf within the year. Either this view had its influence, or else the longer tests carried greater conviction in affording the public better knowledge of their progress; the first news of the short ones being that they are over and done with, and the cow let down. We think that ultimately a 300 days' test will be the standard that will govern fashion in breeding. This will give 60 days in which to dry off and rest the cow, the calves being a year apart.

In England they have a proverb that the last Derby sets the fashion of breeding the race-horse—for a year. This proneness to seize upon the latest thing out as the best, is being repeated here with butter cows. But the history of fashion in breeding by tests, for any specialty, will show that it moves in a circle, the circumference of which is made up of greater or less segments representing families of merit. The more discerning breeders have learned that if they possess genuine merit, in a family of genuine merit, it is better to hold to their prearranged course and wait for fashion to come around to them—or, as one puts it, to turn back and meet fashion—than to be continually letting go of what they have, in hopes of buying anew to capture it. But the mass of buyers are constantly chasing it up, usually arriving at each stage too late to realize the benefits of its succession of "booms."

A year ago the name of Coomassie electrified the bidding; nothing sold on a par with it. This year the rage is all for Stoke Pogis. While there are abundant reasons for this last preference, there is nothing to warrant the great falling off in prices of high-class Coomassie animals. True, we had grave doubts of their permanency when some of the great figures of 1892 and 1893 were being paid, because we then thought they over-ahot the mark that was warranted by the family exhibit in butter tests, which is, after all, the great balance-wheel that swings straying fashion back to the line of utility. There is no other tribe as strong as the Coomassies. They capture the heart as well as

the head, and for this reason we feared the prices they were bringing a while ago were in part the result of feeling rather than of a cool calculation of values. For years the Jersey was practically kept within a sphere of sentiment in this country—hung in a gilded frame as a work of art—and we believed at the time that more or less of this sentiment accounted for the margin by which Coomassie cattle outsold all others. But we have ceased to doubt that Coomassie blood is destined to maintain high prices purely upon its butter quality. History may repeat itself, and fashion withhold her smiles for the day, but the circle will bring her around again.

While public attention has been diverted by other startling demonstrations, the Coomassie blood, particularly through her son Khedive, has shown a degree of butter quality that gives it a place in the front ranks. The test of Princess 2d 8046 in Mr. S. M. Shoemaker's herd is a very remarkable one. After running three weeks at over 26 lbs. of butter a week, she was given a fourth week under high pressure, and gave 27 lbs. 10 oz. Her 28 days footed 107 lbs. 3 oz. Assuming that she held an average rate for the three succeeding days, her month of 31 days would foot a trifle over 118 lbs. This closely bears out our estimate of a possible 30 days' yield in a former letter. We have heard doubts expressed whether she is a year-around cow. While we know nothing about her as an individual, we have noticed that a very large proportion of the most creditable tests pertaining to the Coomassie family have been made at periods when the cows were long in milk and well advanced in pregnancy, leading to the impression that holding out through the season was their especial forte. When the astute manager of Burnside Park bid off Princess 2d at \$4,800—then the highest price for a Jersey—we confess that we feared he had indulged his fancy for an untested cow at rather an extravagant rate, though to look at, she was a picture worthy of a golden frame. Three days later he took home Oxford Kate 13646 at \$3,550. The latter was by Pilot, a son of Khedive; and as she has just tested 23 lbs. 10 oz. in 7 days, we are bound to acknowledge that he placed his money to better advantage than we could have done. Mr. J. V. N. Willis, who assisted in the test of Princess 2d, expresses the belief that when grass is just right, Oxford Kate can be put up to a higher test than that of Princess 2d, which now heads the list. Ona 7840, by Khedive, that has already a test of 20 lbs. 13 oz., is now surpassing any previous form, and her owner, Mr. S. M. Burnham, anticipates a still higher test this spring. King's Trust 18946, a three-year-old, has just given him on second calf a test of 18 lbs. in 7 days. She is by King, son of Khedive. The tests of Princess 2d, and Ona, daughter of Khedive, give him the highest two combined as well as the highest single test, while if granddaughters are considered his blood has the highest three tests that are descended, equally as close from any bull. We are impressed that these results indicate farther mischief with the records. All this blood was dropped on the other side of the Atlantic, and has against it the disadvantages of acclimating. We would like to see some of it tried for a full season. If the opportunity is too far passed with either of these leading cows of the tribe, they can at least be given a trial when 5½ months in calf, and if the results are proportionately as good as the flush tests, the circle will have to make a place for Khedive. He has other tested daughters and granddaughters that ably sustain those above mentioned. Of late years his near-by blood has been very costly on the Island, but all its best animals are now in this country through the importations of Messrs. T. S. Cooper, S. M. Burnham, T. A. Havemeyer and A. M. Herkness & Co.

Cleveland Bays and Clydesdales.

Cleveland Bay is a name given to a class of horses first noticed in Yorkshire, England, the name being taken from the district of Cleveland. The prevailing color is a bright bay. In the latter part of the last century the district became known for producing a heavy horse suitable for coach and cavalry purpose. They are the produce of a cross between the race horse and the large native horses of the country, and are so well defined in type as to justify the classing of them as a breed. But their history shows that the breed has been subject to changes in form to suit the times. Traveling by steam has done away with the old-fashioned coach, and the improvement of public roads has reduced in size the cumbersome carriage used in those days, consequently these horses have been reduced in bulk by a further infusion of the blood of the thoroughbred horse, to conform to the wants of the times.

The race of heavy draft horses known as Clydesdale, takes its name from the river Clyde, in Scotland. The Clydesdales have undoubtedly a similar origin to that of the English cart horse,—and even now there is a resemblance between the two breeds. The Scotch have a tradition that during the twelfth century one hundred choice stallions were imported from Flanders, the same source from which the progenitors of the Lincolnshire cart horse were derived. It is evident there has been a different object pursued in the breeding of the Scotch horse. The English breeders of the dray horse seem to have had in view the aim of producing immense size and strength, combined with slow action. The Scotch, on the other hand, have as their object size, strength and quick movement, which they have succeeded in establishing in the breed. This result has given them a superiority that renders them more desirable for many purposes, and therefore more valuable than the English cart horse. At the present time the English breeders find the Scotch horse in better demand than their slower animal, being but a trifle less in size and strength.—*Western Rural*.

Sheep Notes.

Few things in the progress of the civilized world are more astonishing than the increased consumption of wool. This is best shown in the statistical account of the production, which in the year 1880, was about 830,000,000 pounds weight, and in the year 1871 had raised to 1,936,750,000 pounds. In this extraordinary aggregate Europe produced 853,750,000 pounds; South America and Mexico 274,000,000; Australia, 255,000,000; Africa 96,000,000; balance, scattering.

This remedy for foot rot in sheep is said to be unfailing: Take equal parts in weight of red lead and pulverized blue vitriol and enough nitric acid to make a thick paste; after paring the hoof until all diseased parts will be well exposed, apply with paddle. Sheep should remain in house with dry floor twenty-four hours after being treated, unless the weather is quite dry, when it is much better to turn on dry, short sod; but care should be taken to prevent sheep from crossing streams or mud. Three applications are usually sufficient.

In many of the older portions of the country sheep, for one reason or another, have been crowded off of the farms. There are indications of a return to the wise practices of the fathers, when every farm had its flock. Says Col. Curtis of the *Rural New Yorker*: "Sheep fit in so nicely upon the farm that they can hardly be dispensed with. They have an advantage over other stock, inasmuch as they may be made to furnish an income twice in the year—first the wool, and then the lambs. They may be made to do more than this, and really to afford another income in the Autumn or Winter, by the fat-

tening and sale of the old sheep, or the sale of the surplus stock.

The profit from a flock of sheep, and the same is true of poultry, consists mostly in the increase saved and reared, says the *New York Tribune*. Of poultry fully one-half the eggset are lost and half the chickens hatched never reach maturity. Among sheep the ratio of increase is equally unsatisfactory. Many flocks do not rear fifty per cent. of lambs. An Ohio sheep-owner recently congratulated himself on rearing an increase of 75 per cent. of lambs. This is far too small a profit. An English farmer gives a list of his yearly crop of lambs for eleven years and the increase reared was an average of 169 lambs from 119 ewes counting the whole flock, fecund and barren together. Another farmer reports an average increase of over 150 per cent. yearly for seven years. It is worth while to read how these ewes were managed—for it is all in feeding and care. The sheep all have mangel and some linseed cake and a regular allowance of salt. Other English farmers report the following increase: 153 lambs from 97 ewes; 190 lambs from 117 ewes; 174 lambs from 92 ewes; of this last flock not one was lost in a year. All the sheep have roots and crushed oats, linseed and cut hay. Perhaps the feeding has a great deal to do with it, and we may learn something from these examples.

New Method of Salting Butter.

Mr. T. S. Kingsley, of Indianapolis, has been putting the salt in the churn in the shape of strong brine, instead of working it into the butter afterward. He gives the following as his method of butter-making: "The cream was about three days from the cow when it was put into a mass, and so nearly sweet that it was barely thickened, and kept in a room at 55° and churned at 63°, the churning requiring about an hour; and when the butter had all come, but not gathered, two gallons of skim milk, at a temperature of about 50, was thrown in the churn, when only a few minutes were required to gather it. There were sixteen gallons of cream at the start, and there was about that amount of water at a temperature of 52° thrown into the churn after the buttermilk was drawn off. The churn is a revolving box. The churn was then turned rapidly for a moment, and then the water drawn off, and about two gallons of strong brine was put on with the salt and the churn turned slowly for about five minutes, when the brine was drawn off and the butter packed in the pail, and you got it in that condition." The *American Dairyman* has been trying a sample of this butter and pronounces it delicious—salt enough for the market, but without any streaks or mottlings and with the buttermilk thoroughly worked out.

Poultry Yard.

Attend to the Nests.

While there are many poultry breeders, as well as farmers who raise fowls in large numbers, who regularly clean out their fowl-houses, removing and carefully housing the droppings thus obtained, the number of persons who pay the proper attention to the nests and nesting boxes is very limited. It seems that the majority of fowl raisers have an idea that a nest is good enough for a year's hard service, when once properly made, no matter how many times a brood of young chicks has been hatched in it or how many times laying hens have visited on business. But it is an absolute necessity that nests are kept clean, and well supplied with fresh hay, straw, or other good nesting material, and all good poultry breeders recognize it as such. Those who complain of getting few eggs, are usually the ones who do not supply their hens with plenty of good, sweet and clean nests for them to lay their eggs in, leaving

the fowl to find places to lay, wherever they can. The result is, that only part of the eggs are found, the remainder going to sustain and fatten rats and other pests which are always found under and around farm buildings, especially old ones.

We have found that the best place to locate the nests so as to afford always the surest preventive against the hens eating their eggs (as some kinds frequently will), is somewhere in the dark or in the darkest and most secluded part of the fowl house. If the hen that is disposed to destroy her own eggs cannot see them, after laying, she shortly gets cured of this habit. This is one advantage in the secretly arranged nest.

It is quite immaterial how the nest is thus darkened. A narrow covered passage leading to the nest, may be arranged, so that the hens will have to pass through this, to lay at the other end of it. Half barrels or cracker-kegs may be laid on their sides, and turned towards a plank wall, leaving only room between the open end of the kegs or barrels and the partition, for the layer to creep into this retired spot. They will quickly get accustomed to any place thus prepared for their convenience, and will lay their eggs very regularly in such dark places. The very best kind of nests, however built, are those which are secluded, retired, and quite dark in the interior.—*Poultry World*.

Fresh Meat for Fowls.

There are very many of our readers who live within a reasonable distance of either slaughter-houses or butchers' shops. To those we would say, secure all the scraps of waste meat, the offal pieces and the bloody pieces which are unsalable. These can be secured, regularly, at but a trifling cost, generally. Take them home, cut them into fine pieces put them into a good-sized boiler, with plenty of water, and boil them until they are boiled into shreds. When this is done stir corn meal into it until it makes a thick mush, and cook until done. Turn it out into pans and let it cool, and you have a most excellent food for your fowls.—*Poultry Yard*.

The Apiary.

Foul Brood.

Foul brood is of vegetable growth—a fungus. It spreads by contagious spores. Little specks of it, hardly discernable to the naked eye are carried along on the legs of bees running over affected combs. Wherever one of these spores drops into a cell containing larvae, the larvae dies, changing soon into a brownish putrid mass, settling into the lower corner of the cell, and foul brood has begun. If it happens that larvae are affected and die before the cells are capped, or while the bees are performing their usual labor, capping, unconscious of the trouble below, we find these cells a few weeks afterward, perforated at or near the center, and easily recognize them as diseased. Larvae in uncapped cells, killed by this disease, settle into the lower corner as a rosiol substance, and dry in the course of time into a hard, coffee colored mass—easily recognized.

TREATMENT.

If you have not time or patience to give the most thorough attention to affected colonies, it is probably best to destroy them utterly, rather than to allow the least chance of a spread of the scourge.

If you can make a thorough job of it the following is said by Chas. F. Muth to be effective: Brush the bees on a few frames of comb foundation into a clean hive, giving them a jar of food, either honey or sugar syrup containing the following mixture in the proportion of one ounce of it to every quart of food: Salicylic acid 16 grains; soda borax 16 grains; water 1 ounce. The bees being deprived of comb and brood, partake readily of the mixture. A mixture of one-half the strength of the above may be used with an atomizer for spraying affected hives. In this case every bee, cell and comb must receive thorough treatment.

Horticulture.

Small Fruits for the Farm.

When the culture of small fruits is understood they can easily be grown and will furnish a healthful dessert and food at a season when it is most desirable to cool and purify the blood. During winter a diet of fresh fruit is not easily obtainable and small fruits coming early in the summer are most opportune. Every farm should have its supply of early, intermediate and late varieties so that fresh fruit may always be in supply. These may be grown in a garden or plot of ground set apart for the purpose and enclosed, if necessary to protect them, or it may be a part of a field in which stock are not allowed to run. The different kinds of fruit should be planted in rows, each kind by itself, and the rows far enough apart to admit of being cultivated with a horse. The rows, for strawberries, should be three feet apart and for raspberries, currants and gooseberries, they should be four feet.

When a plot of this kind has been planted it is no more trouble by using a horse and cultivator to keep in order than so much corn. It is very poor economy to depend upon the fields for a supply of berries, and more, it is cruel, as the work of gathering them comes upon the women who are thus made to toil hours in the hot sun, when in a cultivated berry-patch it takes but a few minutes. Nothing delights a house-keeper more, or is more pleasing to a farmer's wife than the means to provide a bountiful table. Strawberries come first in the season, and if potted plants are set a supply of fruit may be had the next year. Layers require a growth of a year before fruiting. These plants may be set in August or September, a foot apart in the rows. Wood ashes are the most natural fertilizer of anything for strawberries. Well rotted barnyard manure should be liberally mingled with the soil, which should be plowed as deep as possible, as strawberries and all other kinds of berries are very exhaustive in moisture; a mellow condition is necessary for the better absorption of rain and for allowing the moisture to come up from beneath the surface to sustain the plant. Thoroughly wetting, in a dry time, will both increase and lengthen out the bearing. There are two ways of allowing berries to grow; to cover the ground in a continuous bed, or to keep them in rows by cultivation between them. The latter is the best, as weeds and grass will destroy the bed in a year, if allowed to spread. A slight covering with straw will protect the plants in winter, and prevent danger of winter killing. A half dozen varieties are all which are required for an ample and continuous supply for a family, and among the best are the Crescent early and productive; Shoemaker's Large, Manchester and Jersey Queen intermediate, and Kentucky late. There are other varieties of merit but all the above are hardy and suited to different kinds of soil.

Raspberries are more easily cultivated than strawberries, requiring less labor to take care of them. When once out they will perpetuate themselves for years if the ground is kept clear of weeds, and mellow, so they can take root readily. New plants should be from the tips of the black cap varieties, and they may be transplanted in the fall or spring. Of the red sorts, Cuthbert and Turner are the best; of the black caps, Davidson's Thornless, early, and the Mammoth Cluster and Gregg in their order. Blackberries may be treated in the same way as raspberries, and are later in ripening, and in my opinion are next to strawberries in desirableness, besides being very healthy. Wilson's Early, not very hardy, ripens soonest, while Snyder, and Taylor's Prolific, are hardy, prolific and suited to any soil. There are fancy berries whose merits are widely proclaimed by interested parties, but which, on trial are

found not to be adapted to general culture and more often a failure than a success. Such kinds I have not recommended but only those which have been fully tested on my farm. There is always a market for surplus small fruit, and, with a little extra pains, the small fruit garden may be made both a source of delight as well as of profit. Currants white and red, and gooseberries should be added to the list, as they fill important places in the kitchen for jellies and table use.—*Ex.*

Seasonable Hints on Fruits.

Fruit trees which have been recently transplanted will be greatly assisted by mulching over their roots, and for this purpose there is nothing better than partially-rotted stable manure. It is better to apply this mulching now than earlier, as, when applied at planting time, it has the effect of keeping the ground cool when it should be rather exposed to the warming influence of the sun, which encourages the growth of roots, but, as the season advances, the covering will have a tendency of retaining moisture in so far that it prevents, or at least modifies, surface evaporation. If the trees were not cut back sufficiently at the time of planting and are now producing weak growths, they may be yet cut back, which will cause them to make a better growth.

It is a well-established fact that pruning weakens trees, but when a tree is moved its roots are much abridged, and it is found that it will fare better when the branches are also shortened, which helps to restore the balance between the roots and the top.

The peach trees, so far as we have been able to observe, have set a very heavy crop of fruit. Much of this will drop before the stoning process has passed, but where the finest fruit is desired some of the smallest fruits may be removed. This can only be done well by hand and is a tedious business, but those who have practiced it find it a profitable operation, as it adds to the value of the fruit far above the cost of thinning the crop, and where but a few trees are grown for family use the result from thinning will be very satisfactory.

When blight appears upon apple or pear trees, it is a good practice to cut off the diseased branches at once and burn them. The advice to cut up and destroy all trees that show blighted branches is not commendable. The new shoots which follow this pruning are seldom attacked, and we have known trees which were so severely blighted as to reduce them to mere stumps to recover and soon make perfect trees. It seldom happens, however, that trees become so badly blighted as to involve the cutting away of all their branches, but all blighted twigs should be removed as soon as they are observed, and, where this is persistently followed, the blight will not be found so formidable as many persons would lead us to believe.

CURRENTS.—Currant bushes are so much benefited by a coating of manure over their roots after the fruit has formed that it should be considered a necessary factor in their culture. The same may be said of the gooseberry. The want of moisture and nutriment during the period of the swelling and ripening of the fruit oftentimes renders these crops of but comparatively little value. Where a plentiful supply of water is available for irrigation an application of guano on the surface, stirred into the soil, then well washed in with water, will vastly increase the value of the crops.

RASPBERRIES.—The staking of raspberries is almost a thing of the past. Instead of being supported with stakes or wires, as formerly, the plants are so managed as to support themselves. This is accomplished by cutting off the tops of the young shoots or canes when they reach to a height of from two to three feet. This causes them to

produce shoots, which may also require stopping or cutting back later in the season. As soon as the fruit is gathered remove the shoots that produced it. These are of no further use, and their removal will allow the shoots of this year's growth to perfect stronger wood and fruit buds for the future crop. It is also necessary to keep all young suckers hoed down as they make their appearance and thin out the shoots which are to be retained, allowing not more than four or five to remain. All this may be classed as fanciful treatment and a foolish waste of time and money by those who have not tried it, but we can vouch for it that if once tried, it will never be abandoned for the let-alone system by those who value plenty of fine fruit.

STRAWBERRIES.—On plantations which are to be kept for fruiting another year the soil between the rows should be well broken up and pulverized as soon as the crop is removed. A sharp-tined cultivator should be employed. Broad-bladed implements only scratch the surface, without sufficiently loosening the soil. As runners form remove them as effectually as practicable. Young plantations set out last spring should be carefully tended, the soil kept clean and friable and all the runners kept cut off if the very best results are sought for. To get the largest yield of the best fruit, strawberry plants should be set from six to twenty inches apart and every runner taken off during the season. Under this treatment large clumps will be formed, heavily set with crowns or fruit buds in the fall, and will produce a premium crop. Managed thus, we have seen one hundred plants produce one hundred and ten quarts of berries.—*National Tribune.*

Bagging Grapes.

A writer in the *New York Tribune* says: I have used a comparatively simple way of supplying bags to protect grape bunches. The stem of the bunch is at one angle of the mouth of the flattened bag, and the whole top is turned down with a single flat fold, just as we turn down the leaf of a book. The pin to hold the fold down is then easily inserted. Little or no rain can enter; the bag will serve another season, and the motion of applying it being the same in nearly all cases, and very simple, is so much the more speedy. Red grapes kept for me in good condition till April last year. They had been in the bags undisturbed—only by picking them and placing them in a cool room, and later in a cellar—from July 1 to April—nine months. There are a number of advantages attending the use of the bags, as will be found by any amateur who makes the experiment of using some. One to two pound grocers' bags answer the purpose excellently.

Another correspondent of the same paper in treating the same subject says:

We did not gather the last "bag" of Concord till the first week of November, three weeks after the foliage had been totally killed. They were exceedingly rich and piquant, and although the disturbance caused several berries to drop off, the bag retained them, and hereafter we shall gather our Concord in the bag, as we want them, up to mid-November, if hard freezing defers so long. As to the bags preventing rot we can only say from here that we have as yet found only one or two Jonas affected on one bunch in a rather open bag; but there was not much rot this year outside of bags. The bags left open at bottom are not so good; insects get in, and detached grapes roll out. Our bags look as if they might serve another season; we have no very heavy rain storms to strain them.

But there is another unmentioned merit of these paper bags too good to be passed over. They are a great aid to the keeping of grapes in the house. For years we have tried one

after another of the published methods of keeping grapes, with vexatious ill success. They moulded alike in a cave, in a dry bank and in the cellar; while in dry rooms they shrivelled; and if packed in cotton, so many were apt to be detached and become nauseous that we lost hope of enjoyment from stored grapes. The only ones that kept well were some of Rogers' red sorts under glass, cold, left hanging on the vines. But now bunches of many sorts, laid in the bags on a large scaffold in a cool room of still air, keep admirably, and we have never yet taken out a pin to open one of the bags without a treble delight over their beauty of bloom and fullness, their exquisite piquancy of flavor, and the renewed hope of having all this enjoyment close under hand for months of future years.

J. B. Rogers gives some notes on the details of bagging grapes:

The only safe rule is to apply the bag as soon as the cluster is formed. If delayed too long, the spore of disease may have attached itself to the berry and result in rot. Some have applied the bag before blossoming has taken place. As the new shoot is very tender and brittle, great care must be exercised not to break it. Take manilla or any other paper bags; cut off the upper corners, in order to wrap the upper portion around the cane, and then pin it. The size of the bag depends upon the usual length of the cluster, and whether more than one cluster is placed in a bag. A two or three-pound bag is sufficient for most single clusters. As a result of bagging, the clusters will average larger, ripen later, color in general better, produce larger berries, and the bloom will be preserved more perfectly than in those not bagged. As to flavor opinions vary. Some think it is better, others that it is not improved.

Seasonable Hints in the Vegetable Garden.

FREQUENT TILLAGE is as essential to success in the garden as manure, and in many cases even more so. Successful market gardeners bestow, not seldom, more labor on some crops in a single week than many a farmer gives to his corn and potatoes in a whole season.

In this connection it should be borne in mind that with shallow-rooted plants deep cultivation must be avoided. In the field, cultivators and harrows should be used, instead of deep-running plows; and, in the garden, prong-hoes and rakes instead of hoes.

SHALLOW CULTIVATION at short intervals is one of the most efficient means to counterbalance the effects of drought. The coat of loose soil which is thereby spread over the roots serves as an excellent mulch, as effective nearly as a covering of straw. Careful experiments made at the Missouri Agricultural College, in this regard, leave no doubt in this matter, and lead Professor Sanborn to state that "tillage, to conserve moisture, must be shallow, not over two inches in depth, the aim being to get a thin layer of dry surface soil that will act as a non-conductor of moisture between the dry air above and the moist surface below. Hence, deep tillage of surface-rooted crops, like corn, is an erroneous practice, founded in erroneous views. Plowing out corn involves too deep tillage in dry weather, but adds to the mischief of severing the roots of corn needed at such times. Our double-shovel plows work too deeply. Our true policy in drought is frequent and shallow tillage."

ASSISTING GROWING CROPS.—It is sometimes observed that in ground well enriched with stable manure at the time of planting the crops do not make as vigorous growth as might be expected. The principal cause of this is that the fertilizers applied are not yet in an available condition; they are in too crude a state to become absorbed by the fine feeding roots of the plants.

Young plants, as well as young animals, require their food in the most digestible

form. You may feed a baby to death with solid food, but if you wish to nourish it, you must give it milk. It is similar with vegetables; a young plant may starve while surrounded with crude, dry manure, while a fraction of it in solution would give nourishment and life. An occasional dose of liquid manure acts like magic upon weak plants.

HILL SIDE PLANTING.—In gardens with sloping grounds the rows run frequently parallel with the crest of the hill, so as to make them as level as possible. This plan, although it affords easier cultivation, especially when horses are employed, is very defective in that it subjects the ground to more danger from water than when the rows follow the slope of the hill. In the latter case the water that falls during a heavy shower is distributed and carried down the hill in a great many small channels, while in the other it is held back in the furrows until the ridges become insufficient to hold it back. The entire bulk of water thus accumulated breaks through, rushes down the slope to the serious damage of the crops, washing away the most valuable portions of the soil.—*American Garden.*

Growing Pansies.

This is one of our most beautiful flowers, and though it is popular and to be found in most gardens, comparatively few people understand its proper cultivation with a view of obtaining the finest flowers. They will go into the grounds of the florist and express amazement at the great size and beauty of the pansies they see there, will forthwith purchase a supply for their own planting and will be charmed with them, and be determined to grow the same on their own premises, though their previous efforts have so signally failed. When asked how they had been growing them, they often reply, "Oh, I got some from a neighbor, who has large beds of them, but they are all so small." When told that they should sow the seed of the finest of those obtained from the florist as soon as the seed was matured—say some time in August—and that that was the only way to have fine, large flowers, the idea was jumped at. And yet that is the way to get them. Every August the seed of the largest and most desirable should be sown and the old ones dug up and thrown away. And we should say that this was easy enough to do when it is once known. In the winter the plants should be lightly covered. There are new pansies advertised every year, but any one growing them carefully and taking, as we say, the seed from the best every year, will be as likely as anybody to have large, new kinds, and will thus save the expense of purchasing them, which, at most, last only for a single blooming.—*Telegraph.*

Trimming Hedges.

Very serious mistakes are often made in trimming hedges. To have a hedge look well, it is important that it should be kept thick at the bottom; this can only be done by encouraging the growth of leaves; the moment the leaves begin to die on the lower branches, that moment the hedge will begin to lose its beauty, and gradually there will come unsightly gaps at the bottom of the hedge, which when once made are very difficult to cover up with foliage.

With a hedge properly trimmed it is difficult enough to keep all parts of it green and well filled with leaves; but with the usual method of trimming it is very nearly if not quite impossible. As the great enemy to the growth and vigor of leaves is shade, every effort should be made to bring all portions of the hedge into the sunshine; to this end the top of the hedge should never be permitted to overhang the bottom. To trim the sides perpendicular and the top square,

is not only to make a stiff unnatural and unsightly hedge, but it is bringing the lower part of the hedge where it cannot get as much sunshine as it needs.

The bottom of a hedge should always be the widest, and the top should round up somewhat in the form of a young cedar or hemlock tree that grows in the open field. This form will leave the lower branches in a position to get sunshine and air, elements so necessary for the growth of leaves.

It is almost the universal custom to trim a hedge with pruning shears, but if one cares more for beauty than time, the pruning knife is the best, providing it be used by one who understands his business, and also providing natural beauty is sought for. To use the shears year after year gives the hedge a stiff unnatural appearance, but with a knife in the hands of one who understands natural beauty, the twigs may be cut so as to leave a natural appearance, and yet keep the hedge in a symmetrical form.

These remarks apply more particularly to evergreen hedges, which to keep in perfect condition requires even more care than a hedge of deciduous trees or shrubs. One of the principal causes for abandoning hedges is because of the fact that they have been so trimmed that they have become unnatural and unsightly objects.—*Mass. Ploughman.*

Cultivation of Chrysanthemums.

No class of plants thrives so well with as little care as the Chrysanthemum, and as a town plant it has no equal. It seems to thrive equally well in the smoke and dust of large cities as in the open country, requiring only sun a few hours each day, rich soil, and occasional watering.

Small plants may be planted as early as the first of April,—but any time to the middle of May will be soon enough,—about as far apart as to allow from two and a half to three feet for each plant. This may easily be done where a border can be devoted to them alone; but when grown in a mixed border where other plants are growing, a space of two feet should be allowed for the Chrysanthemum. The soil must be made rich with manure, and kept clean.

About the first week in June each plant should have the center of the shoot pinched out, which operation is known as stopping. A strong stick should be placed by the side of each plant, to which it should be loosely tied. In a few weeks there will have grown four to six more shoots four or five inches long. These must again be stopped, by continuing the process until the first of August; after which time every shoot should be allowed to grow, and not stopped any one. Keep the plant tied, so as to prevent its being broken by the wind.

By the first week in September many buds will be formed, and, if very large flowers are desired, one-third or more of the buds should be taken off. Some weak liquid manure should be given about the first of October.

If the plants are required for decorations in the house or greenhouse, they may be easily dug up, potted into different sized pots, according to the plants, and set in the shade a few days. They must be well watered, after which they may be placed in the sun until there is danger of frost, when they should be moved into a cool room or greenhouse, but not subjected to fire-heat more than to keep out frost. This is a very simple and satisfactory course of treatment, and can be carried out successfully by the merest tyro. For very large specimens, and for cultivation in pots, more time and attention are required, costing of course, more to accomplish.—*JOHN THORPE, before the N. Y. Horticultural Society.*

The Single Dahlias will be very popular this season, they being less stiff and formal than the old double sorts.

The Begonia as a Decorative House Plant.

Rand, in his book of Flowers for the Parlor and Garden, says: "The only two species of this ornamental stove plant that do well in the parlor are *B. incarnata* and *fuchsoides*. This is a very great error, as the ladies have found out for themselves, and I hazard nothing in saying that there are a few varieties, at least, of this extensive family, that for decorative purposes for parlor growth have no equal.

I have seen in the parlors of a number of lady friends magnificent specimens that would be considered well grown even in greenhouses under the care of skillful gardeners. Possibly, under the same conditions, other plants now thought little of would be found admirably adapted to house culture. I believe the principal reason of the Begonia's prosperity is, that it is often the only plant grown in a window, hence has air and light all around it, instead of being huddled with a number of others, each one struggling for a bit of light and fresh air. The highly ornamental condition of the foliage and stems of the whole plant seems to have suggested the position it occupies, which is usually on a small, fancy round table often in a bay-window with the same side to the light, its leaves sometimes spreading as much as eighteen inches. Experience teaches, that this is best, as the stems and back part of the leaves are themselves usually the most showy portion of the plant. Not all the greenhouse men grow the varieties wanted by the ladies of the household, hence slips are frequently furnished each other. I suspect if florists knew and would grow the varieties wanted quite a trade would spring up for plants in three or four inch pots. Very likely a plant grown in the greenhouses to large dimensions might fail if transferred to the house, as the peculiar conditions of the atmosphere of the greenhouse cause a more succulent growth than in the window, where dry air and higher heat cause slower growth. This plant does well in jardiniere pots, and, of course, is more in keeping with a well furnished house, than in common pots, besides being more easily kept clean and neat.

In extreme summer days when the house is often darkened during the day, the Begonia should be given plenty of room out of doors, in a partially shaded and sheltered situation. If small in June, it is best out of doors, plunged in the ground, where it can have considerable sunlight. With proper care in watering, the plant does not need a large pot, and one removal will answer for the season.

The Begonia is now extensive in variety, and as new ones are constantly coming out they are being crossed with each other. There are three distinct classes, one grown exclusively for flowers, small leaved and bushy in habit, of which *Sandersonii*, *semperflorens*, and *incarnata* may be taken as types. Another growth for flowers is creeping or climbing in habit. Some of them are tuberous in character, notably one of recent introduction, called *B. rubra*, is a perfect gem of a flower, bright red, with large trusses and a handsome, glossy foliage. This would do well in a window. The latter are grown more for foliage, though when in flower they are quite showy. This class is very extensive; and among them are the kinds found to do so well as parlor plants; it also includes the old *B. Rex*, and now has numberless varieties.

While some of these do fairly well as window plants, those having thick, leathery leaves, tarnishing not so readily, are perfectly at home in the parlor. Even the old *B. manicata* stands well. It should not be forgotten that for window gardening a plant is better when, as gardeners say, under-potted rather than over-potted. That is, the plant should well fill the pot with roots; with a full supply of water alone a plant is able to sustain itself. The rule is to water at one time rather than little and often. The large, leathery leaves are much benefited by sponging to keep free from dust.—*Cor. Prairie Par.*

Best Roses.

The Massachusetts Horticultural Society gives the following list of the best hardy roses as continuous bloomers for outdoor culture, and of the best hardy roses adapted to general cultivation, recommended by the committee appointed by the society. Continuous bloomers: Alfred Colomb, Annie Wood, Boieldieu, Caroline de Sansal, Fisher Holmes, Francois Michelon, Gen. Jacqueminot, Marie Bauman, Mme. Victor Verdier, Mons. E. Y. Teas, Pierre Notting, Rev. J. B. M. Camm, Xavier Olibo, Charles Darwin, Countess of Oxford, Dr. Sewell, Marguerite de St. Amande, President Theirs. The last five are fine, constant bloomers, but liable to mildew. Hardy roses for general cultivation: Alfred Colomb, Anna de Diesbach, Annie Wood, Baron de Bonstetten, Baroness Rothschild, Charles Lefebvre, Duke of Edinburgh, Etienne Levet, Fisher Holmes, Francois Michelon, Gen. Jacqueminot, John Hopper, Jules Margottin, La Rosiere, Marie Baumann, Marquis de Castellane, Maurice BERNARDIN, Mme. Gabriel Luizet, Mme. Hippolyte Jemain, Mme. Victor Verdier, Mons. Boncenne, Mons. E. Y. Teas, Paul Neyron, Rev. J. B. M. Camm, Thomas Mills, Louis Van Houtte, Mlle Marie Rady, Pierre Notting. The last three are difficult and uncertain, but so remarkably fine that the committee could not refrain from mentioning them.

The Grange.

The Grange.

VIEWS FROM CENTENNIAL.

We are all very much edified and impressed, of course, who were present at the recent meeting of the Baltimore County Grange, by the speeches of the gentlemen who addressed the assemblage after the adjournment of the Grange. The calm and thoughtful paper of Secretary Sands was a fair exposition of the objects and purposes of the Order.

The earnestness of the Master of the State Grange, Bro. Devries, commanded our own earnest attention, and in the main we agreed with him, though not on all points, as we will endeavor to show. To our mind the remarks of Bro. Sanderson showed that he was nearer to our ideal of the proper work of the Patrons of Husbandry than the Worthy Master. We look upon the Grange not as an institution through which farmers are to seek for political fame; not as a combination to bull the market and force prices up to what we consider paying prices. No combination of men, be they farmers or mechanics, can long control the laws which govern the prices which men will pay for their goods. The market value of the farmers' products is mainly fixed by the great law of supply and demand, and no combined effort of farmers can long affect this law. True, the efforts of gamblers in grain and produce can for a time force the prices above or below what is natural, but these are only temporary and the farmer usually gets as near the actual value of his goods as people in other lines of trade or labor.

The effort to get any one class of the community to array itself as being independent of all others must of necessity fail. Farmers of course are more independent than those in many other occupations, but the fact is that no class of men can afford in this day to undertake to stand alone, and arrogate to its class any further recognition as a class than any other is entitled to. All talk about the farm being despised by people in other walks of life, of the terrible hard labor and privation of the farmer's life, is simply "bosh." The fact is, farmers as a class do not work any harder, if as hard, as people in the same rank of life do in other callings. The city merchants work harder and longer. They may not sweat quite so much, but their work is

more exhausting to body and brain. The farmer works hard for a little while, but when the crops are laid aside, and winter sets his grip on us, who enjoys the season more than the farmer, and who has more leisure for self improvement if only used aright? Even during the season of hard labor I contend that it is not at all necessary for the farmer to work from four to nine, as our Worthy Master Devries expressed it. The ten hour system, with some exceptions at harvest, &c., is just as practicable on the farm as elsewhere.

The man who uses brains in his business, and directs his help aright, can get as much or more done in ten hours as the man who is forever trying to drive his men from daylight to dark. In my own experience I find that ten hours a day is as long as men usually keep steadily at work, and if the hours in summer extend to dark the men will make up the difference in slack work. And I do not blame them. It is entirely unreasonable to expect farm and garden workmen who have any ambition or thought about their work to be content to drudge from daylight till bedtime, day after day, without any time for themselves or their families. And just here is where I consider the proper work of the Granges begins, to educate their members up to using more brains and thought in their business, to strive to make the farmers' home more home-like and stir him up to looking after the good of those who labor for him. Men are too apt to regard their workmen merely as so many machines for converting labor into dollars, and think their whole duty is done when their wages are paid.

The Grange should teach the farmers to "put themselves in his place" in all their dealings with their fellows, but especially with those who labor for them. A happy and contented workman is worth much more on the farm than the discontented one who merely mechanically goes through his tasks for his daily pittance, without a thought or care as to how anything succeeds. Then again the Grange should be a social democratic institution, where all its members are governed by the common aim of the good of the whole, and all distinctions of wealth, &c., are for the time laid aside, and people get acquainted with each other who otherwise would never have met. Thus people find out that there is much more in some other people than they ever imagined, and the isolation of the farmer's life is in a measure cured.

The Grange is the farmers' school of technique. Here those who have never taken an agricultural paper and read other men's experience, unconsciously get to aiding in getting up just such material as those journals prize most, the experience of practical men. They learn to think about their business from thinking over what they have heard others say, and when a man gets out of an old rut and goes to putting thought into his work improvement is certain to begin. As Bro. Sanderson said, thinking over his work led him to work less, and make more money; that is it led him to concentrate his efforts on a smaller space and get larger crops. To learn to use thought in their work, to apply brains as well as manure to their fields, is then the greatest benefit the farmers can derive from the Grange. We hope never to see the farmers strive to exert political power as a class, and any effort to do this will be the death blow of the Order. If the Grange succeeds in making the farmer's home brighter and happier for all its inmates, and enables him to increase the yield of all his acres and lessen the hours of his toil, and builds up an *esprit de corps* among farmers in their work, it will have done its duty.

BALTIMORE COUNTY GRANGE held its regular quarterly meeting in the Hall of Centennial Grange, No. 161, on June 5th, with an unusually large attendance of delegates and visitors. It was determined to hold in the latter part of the summer a public all-day meeting and picnic, and the Masters of the several Subordinate Granges in the county were made a committee to make arrangements, procure speakers, etc.

In the afternoon the doors were thrown open and addresses were made by H. O. Devries, Master of the State Grange, James Pentland, Frank Sanderson and Wm. B. Sands.

The American Farmer

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are located the offices of the following organiza-
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Sands, is secretary:

Maryland Horticultural Society.
Maryland Dairymen's Association.
Maryland State Grange, P. of H.
Agricultural Society of Baltimore Co.

BALTIMORE, JUNE 15, 1884.

Death of Mr. Shoemaker.

Samuel M. Shoemaker, one of the most
prominent citizens of Baltimore, and widely
known for his interest in Jersey cattle and
the pains and expense at which he had es-
tablished one of the finest herds in this
country, died on May 31st, at Old Point
Comfort, he having for some time been
in impaired health. He owned one of
the most beautiful estates in Baltimore
county, celebrated for its Jerseys and other
fine stock, extensive ranges of plant houses,
and elegant grounds. He was one of the
founders of the Baltimore County Agricul-
tural Society, and in many ways showed his
fondness for agricultural pursuits. His loss
will be widely and deeply regretted.

BALTIMORE COUNTY FAIR.—The date
fixed for this event is September 30, and
October 1, 2 and 3. A schedule of premiums
offered has been arranged and is now in the
hands of the printer.

Importation of Blooded Cattle into Baltimore.

Col. Webster, the Collector of the Port,
has forwarded to the Treasury Department
at Washington a report of the number of
blooded cattle imported by way of Baltimore
for the year ended June 1. The number
landed was 1,109, which, with 88 calves
dropped in quarantine, makes 1,177. Of
these, 298 were Black Polled Angus cattle,
196 Galloway, 558 were Herefords, 31 Short-
horns, 23 Sussex and 18 Jerseys. They were
mostly bound West, except the latter named
which were sold in this city at public
auction.

Received.

PROFITABLE POULTRY KEEPING. George
Routledge & Sons, New York and Lon-
don, publishers. For sale by W. E. C.
Harrison, Baltimore.

We find this new work thoroughly prac-
tical, furnishing just such information as
farmers and poultry keepers who are desir-
ous of meeting with profitable success
would do well to observe and adopt. It is
evidently written especially for the benefit
of the above named class rather than the
poultry fancier, and is therefore all the more
valuable, as its teachings are sound, prac-
tical common sense, treated in a way that
readily shows the author has derived his in-
formation from ripe personal experience.
The cuts are not overdrawn and are mainly
original, mostly in accordance with the Eng-
lish standard. The cut of dark Brahmas
shows the cock bird with very prominent
culture hocks, which is a bad disqualification
in the American standard of excellence but
admissible in the English. Duly considered,
however, the work is one we can cheerfully
recommend.

Sale of Harford County Cattle.

The *Exps* says: Judge Watters last Fri-
day sold seventeen head of fat cattle to John
Kidd, for James Sawdon, of Wilmington, Del.,
at 6 cts. per lb. The drove included two
home-raised thoroughbred Shorthorn steers,
three years old, which weighed together
2,800 lbs. The price Judge Watters obtained
was a quarter of a cent above the highest
quotations for grade cattle, and is altogether
due to the two thoroughbreds. This sale of
cattle shows conclusively the advantage of
feeding thoroughbred stock as well as the
profit of raising them. Judge Watters' cat-
tle will be shipped to Europe.

Mr. Kidd also bought from Mr. George
W. Kenly, for Mr. Sawdon, seventeen head
of fine cattle, which were forwarded to Balti-
more from Havre de Grace, last Saturday,
and shipped to Liverpool Monday afternoon.

Also from Alexander and Boyd Bell, of
Emmorton, fifty-two head, part of which
will be shipped to Europe. They averaged
about 1,300 lbs. each and were sold at 6 cts.
They were a fine drove of cattle.

Mr. Thomas C. Hopkins, of Deer Creek,
also recently sold ten head of cattle to
McClane & Kelly, of Lancaster, Pa., at 6 cts.
The heaviest weighed 1,500 lbs., the average
weight being 1,275 lbs.

An Immense Ranch Sale.

Many large land sales have been reported
in Texas in recent years, but the biggest yet
noted to private parties is just announced in
the *Denver Live-Stock Record*, that says:
"Mr. J. P. Lawson, of Denver, has just sold
to a syndicate of English and Scotch gentle-
men an immense tract of country in old
Mexico. The price realized was \$1,000,000,
and the area of the country sold was larger
than some of the New England States.
The possessions are situated in the States of
Chihuahua and Durango, in the Republic of
Old Mexico. The title to the lands pur-
chased and sold by Colonel Lawson was the
most ancient of any upon the American con-
tinent. This was the first transfer that had
been made in two hundred years. Longer
ago than that the King of Spain conveyed
this tract of country to the ancestors of Don
Antonio Ansuñola, where it had remained
and descended from generation to generation
until the present time. More than one
thousand people, as tenants, are living upon
this soil and growing corn and coffee and
wheat in the valleys, and sheep and cattle in
the mountains. Colonel Lawson went down
to Mexico two years ago and bonded this
splendid country, paying a liberal amount
of money for the bond. He then went over
to London and Edinburgh and formed a syn-
dicate and effected the sale. The price
realized was \$1,000,000, with an additional

\$1,000,000 to yet be invested in cattle, blooded
horses and agricultural implements. The
purchasers being a syndicate of English and
Scotch gentlemen—C. Macpherson Grant,
Lord Tweedmouth, J. Dalziel, and Messrs.
Cran, Bruce and others, the price being
£100,000 sterling. Colonel J. P. Lawson, of
Denver, is one of the directors. The com-
pany intend stocking the land with the finest
and best breeds of English and Scotch horses
and cattle, and the land will be cultivated
by skilled laborers, and with improved agri-
cultural implements.

Summer Care of Cattle.

During the winter months, cattle kept
under protecting roofs are brought more
closely under the eyes of their attendants
than throughout the grass season, especially
where the range of pasturage is extensive;
and if those attendants and their eyes are
worth anything, the slightest symptom of ill-
ness, or of any other event, casual or period-
ical, needing special attention, will be instan-
tly noticed. It is not necessarily so in sum-
mer, when the cattle mostly attend to their
own wants as regards food and water, and,
excepting the cows when hand-milked, those
which live out-of-doors are not brought un-
der the notice of anyone, for hours, or even
days at a stretch, unless special provision is
made for the frequent and systematic inspec-
tion of the whole herd.

Where the cattle are of any considerable
value, and a single loss falls heavily upon the
owner, it is all the more important that the
intervals between the rounds of inspection
should not be too long. A great deal of dam-
age may be done in a short time, particularly
where the various ages are not separated,
and in-calf cows and heifers herd together
with those which are not in a breeding state.
If the bull runs out with the mixed herd of
cows and heifers, less harm is likely to be
done to those which are heavily pregnant by
attention to the others at certain periods,
than if the cows and heifers, breeding and
not breeding, are left to themselves. In that
case, the excitement and exertion they un-
dergo often cause premature calving, abor-
tion in the early stages, or at later stages,
calf-casting. But if the bull goes loose, then
frequent inspection is needful in order to
book the dates of those he follows.

Where facilities for separation are at hand,
it is doubtless safest to keep the in-calf cows
apart from the rest; but of course this is not
always possible. Separation, however, should
not be supposed to insure absolutely the safe-
ty of a herd, so as to make inspection unne-
cessary. In all circumstances, the more care-
fully a herd is "watched and tended," the
smaller are the chances of loss from neglected
accident or undetected illness.

Even if the non-breeders—that is to say,
the cows and heifers intended for breeding,
not at the time pregnant—are kept apart from
the present breeders, they should be watch-
ed, and if not running out with the bull, re-
moved from among their female companions
during periods of excitement. Many a sprain,
many a strain, and much loss of flesh, from
disturbance, and from time taken off grazing,
might be avoided by watchfulness.

Among the heavy breeding cows, and those
not far gone in calf, constant supervision is
an important necessity. To catch the first
sign of calf-casting and immediately separate
from their fellows those about to cast, is often
the only way of preventing the evil from ex-
tending to the whole of the breeding female
portion of the herd; while the notice and re-
moval of anything likely to cause casting, the
immediate application of remedies in the
case of minor accidents, attention to slight
lameness, and numberless other little details
of daily care, go to make the difference, very
often, between successful and unsuccessful
stock breeding.—*Nat. Live Stock Journal*.

Home Department.

Children and Flowers.

By Mrs. J. R. MOORE BRISTOL.

A friend of mine has a boy, a fine-looking
intelligent lad of twelve, generous and lov-
ing, who is restless and fond of roaming.
His brother is not, usually of a teasing dis-
position, and when Harry has been annoyed
by him until patience gives way, his habit
has been to run out of the city house and
wander off, not returning until late that
evening. The last time this happened he
did not come back until twelve at night, and
was found in the neighborhood hidden.

I have heard that this habit of rambling is
not uncommon, though terribly alarming to
parents and full of peril to a child. My
friend's time is so much occupied in pro-
viding for the support of her fatherless boys
that she cannot give them all the attention
they require. She has a well-grounded
horror of street associates, and determined
to provide some occupation for her sons in
which their interest would increase. She
procured some plants and plain seeds, and
set the boys to work gardening for them-
selves. It is wonderful, she says, how deeply
absorbed they have become. Harry has re-
left the house since unbidden, even when
very exciting events have transpired near
them. His brother has even ceased to be
quite as much of a tease, because his atten-
tion is now taken up with better things.
Morning after morning the seed boxes are
examined, to see what new plants are come
to light, and the grotesque appearance of
some, as they emerge from their earthy
prison with the seed shell or rind like an
umbrella above their heads, causes much
merriment.

In the May floral exhibition, held in the
Academy, I noticed a bright-looking boy of
twelve looking earnestly at the flowers. I
had taken my boys with me, resolving, as
they had had little opportunities of knowing
much of plants, to try and interest them,
and, while studying the Mrs. Baxter varie-
ties of coleus, prize specimens of William
Fraser's, superbly marked with pale green
and gold, purple and rich pink veined and
streaked, half the leaf of one pattern the
rest of another, I told my sons of the foliage
beds I had seen in Paris and London.

Then we looked at R. J. Halliday's table.
Plants with leaves lovely as any flower;
dracena goldieana, with bars of white over
light green; ferns that seemed to float, not
grow, so light, airy and delicate were they;
Brazilian caladiums, like fine tissue paper
marked with Chinese characters; stately
marantas; fuchsias exquisitely trained and
shaped, reminding one of their English
name, lady's ear-drop; Begonias like fine
mosaics; immense fan-like palms; Impatiens
Sultana, vivid and beautiful, with many
others. I was saying that a single begonia
would ornament a king's table, when the boy
I have spoken of came near and asked me
some questions about the curiously-spotted
caladiums. "You love flowers?" I remarked.
"Indeed I do," was his quick response. He
had picked up a broken spray of snowy spirea
from under one of the tables, and seemed to
regard it as a treasure. When we left the hall
he told my younger boy that he intended stay-
ing until the close of the exhibition that night,
as, having done so once before, some flowers
not fresh enough to be of value to the ex-
hibitors had been given him. He said he
lived on one of our large up-town streets,
and there was a good yard to his parent's
house but no flowers. I could not help
thinking, with his keen love of flowers, his
social, friendly disposition, what a safeguard
might be thrown around him by giving him
seeds and plants to cultivate. To be brought
in contact with the works of God is of itself
elevating and refining. Would that our
children had floral clubs, societies and gar-
dening interest. Let us try and cultivate
the taste as a help against temptation.

Artistic Economies.

Emerson said, "It is not disgraceful to be old, but it is immensely disadvantageous," and the same might be said of being poor. In either case, it is consoling to reflect on the Divine law of compensation.

I am really sorry for one who has not had opportunity of practicing some of the fascinating devices for "making old things look amais as well as new." In these days, when velvet, plush and satin are so extensively used in the manufacture of costumes, furniture-covering, window and door draperies, there are many doubtless, having odds and ends of these materials who would gladly utilize them in some way aside from the ubiquitous "crazy" work.

Very elegant little encasels are made as follows: Three pieces of wood, two of them ten inches, and one four inches long. They may be either flat or round.

Cover each piece neatly with velvet or plush. Cross the two long pieces near the top, and tie together with strong twine. Now fasten the short piece near the bottom of these two, and tie the satin ribbon across the fastenings, into pretty bows. Drive two gold-headed tacks into the lower piece, on which will rest the photograph, dainty bit of painting, or lovely card souvenir. Very attractive little banner screens are seen. On a strip of pale-blue felt, six inches long and three wide, was embroidered a graceful spray of wild roses. On either side of it were strips of satin ribbon, attached to the felt by fancy stitches in silk. At the top, was a little velvet lambrequin appliqued in same way, finished with tiny silk tassels. The lower edge was cut into three points, edged with fringe, and tassels placed at each point. The whole, hung from a slender brass rod, formed a beautiful ornament.

A handsomer one was made of bits of satin. Pale blue and white, with the centre exquisitely painted. This banner, when finished, was hung from a pair of large, silvered, fancy hairpins crossed, and tied with satin-ribbon bows. The silver balls at each end, the tiny silvered tassels at the lower points, with the delicately tinted embroidery silks used, formed a lovely combination.

There is an exceedingly pretty mode of over-door decoration now becoming popular which almost any one may accomplish. One ingenious little woman used portions of a child's discarded crib for the Queen Anne railing round the narrow shelf over her door. When it was fastened into position, with a pair of flat vases, and a plaque placed behind it, no one would have dreamed of the amateur carpenter work. The same little lady arranged her windows in a similar fashion and they gave her little parlor a very modern artistic air indeed. An embroidered wool piano-cover had become hopelessly soiled, torn and stained. The embroidered vine running around its edge was cut out, leaving three or four inches of the wool foundation on each side; it was dyed a lovely garnet shade. The embroidery stood out well, showing a slightly different shade from its background, but was made more effective by a rapid and graceful outlining with gold-colored silk. When complete, it made a lovely band for a table-cover and portiere.

There is a very desirable material for glass decoration obtainable now, which is a boon to home decorators. It is inexpensive and its capabilities are unlimited. Who of us in country homes have not mourned over our unlovely front doors, with the inevitable panes of glass above, and down each side. Thanks to "Glazier," we no longer labor with net transparencies, lace draperies, or anything of the kind. Exquisite stained glass designs have taken their place, any lady can accomplish it herself. A row of beautiful squares or diamonds at the top of a bay-window, a fan-light over a door, a window at a stair-landing, or one having an undesirable outlook, may be treated in a most satisfactory and lovely manner. — *Floral Cabinet.*

The Country Piazza.

The piazza, veranda, or porch of a house can scarcely be called an "interior," but to the country house it is really an outdoor parlor in warm weather, and should be made as attractive as possible. It is sometimes so cramped in its proportions as to offer little opportunity for decorative improvements—but with a reasonable amount of space, it can be made a very delightful adjunct to the country sitting-room.

If large enough to admit such a piece of furniture, a settee, or rattan lounge will be found a most convenient addition, and a thin, flat cushion will be an improvement both in looks and in comfort. Scarlet is the most effective color for this, as contrasting well with the masses of green outside. Scarlet painted chairs have been in vogue for rural piazzas for some years past, and although a superabundance of the color is rather dazzling, it is toned down by the background of green.

Another pretty device for piazza furnishing is to make three or more large pillows of very broad-striped bed ticking, and cover the blue stripes alternately with scarlet and green braid. This gives a Moorish or Algerian appearance to the cushions, which are to be piled in a corner, and in front of them may be spread a cheap Persian or Turkey mat—or one made of the same inexpensive materials with varied coloring, substantially lined, and edged with worsted fringe.

A rustic table at one end of the piazza to hold newspapers and magazines, the writing portfolio, or the basket of crewels, looks cozy and sociable. A bird-house fastened to one of the pillars and draped with light vines, is really ornamental, and the winged residents, with restless flashings in and out, and their funny little airs of importance, form an endless subject of interest to the invalid who sole view of outside things must be taken from the piazza.

It sometimes happen that one end of this roofed balcony is exposed to a hopeless glare; no friendly trees stretches forth protecting boughs across it, no vine weaves a web of tender green from end to end; the vegetable world, for some occult reason, avoids it. An awning is the usual resource in such a case, but the striped hood forms only a partial screen. A more effective one is formed by making a net work of heavy twine, or wire, with a square or diamond shaped opening left to form a window; at the base of the net-work plant Cypress and Madeira vines, and you will have a shade pleasing and refreshing to the eye, covered with verdure and bloom, and one that will admit of the air freely passing through it.

Hardy vines upon all sides of the country piazza are taken for granted; but the selection should be made with care. For steady wearing qualities, after it has once decided to live and grow—and it is somewhat slow in coming to this decision—nothing is more satisfactory than the Japanese Ivy. The summer foliage is of a rich, tender green, and the young leaf-sprays are very fine and beautiful; while it has additional recommendation of varied autumn coloring. The Evergreen Honeysuckle is another desirable vine for the piazza, while the large, blue *Clematis Jackmanni* is very ornamental. The three combined will make a delightful leafy bower. — *Ellis Rodman Church, in Godey's Lady's Book.*

Domestic Recipes.

COOKING EGGS.—Eggs which are to be broken into water should not be broken into boiling water as the motion destroys their shape, but let the water be hot as possible without boiling, and let them stand several minutes on the back of the stove. They will then be soft, but firm all through.

BREAKFAST PUFFS.—On baking day, take up a little of the dough of your bread, pulling it out to the thickness of doughnuts, cut two and a half inches in length and drop into boiling lard. Some cooks work into the dough a little butter and let rise again. They are delicious with coffee for breakfast.

HER SECRET TROUBLES.

The Unknown Trials Which a Woman Endured Without Complaint—Why They Vanished.

Near the close of one of the most trying of the few hot days of the present year a pale, care-worn woman might have been seen at the window of her dwelling apparently in a condition of complete exhaustion. Her efforts to meet the accumulated duties of her household had been great but unsuccessful, while the care of a sick child, whose wails could even then be heard, was added to her otherwise overwhelming troubles. Nature had done much for her and in her youthful days she had been not only beautiful but the possessor of health such as is seldom seen. But home and family duties and the depressing cares which too often accompany them had proven greater than her splendid strength and she felt at that moment not only that life was a burden but that death would be a grand relief. This is no unusual experience. It is, in fact, a most common everyday occurrence, and a great prayer is constantly ascending from thousands of homes for deliverance from the deadly power which is enslaving so many wives, mothers and daughters. And yet these duties of life must be met. No woman can afford to turn aside from the proper care of her home and the ones who are committed to her care, although in doing these duties she may sacrifice her health, and possibly life itself. The experience of one who successfully overcame such trials and yet retained health and all the blessings it brings is thus told by Rev. William Watson, Presiding Elder of the Methodist Episcopal Church, residing at Watertown, N. Y. He said:

"My wife became completely run down through overwork and care of a sick member of our household, and I entertained serious apprehensions as to her future. She was languid, pale, utterly exhausted, without appetite, and in a complete state of physical decline. And yet she did not, could not neglect her duties. I have seen her about the house, trying courageously to care for the ones she loved when I could tell from the lines upon her face how much she was suffering. At times she would rally for a day or two and then fall back into the state of nervous exhaustion she felt before. Her head pained her frequently, her body was becoming bowed by pain and all hope or enjoyment in life seemed departed. What to do we could not tell. I resolved, however, to bring back her life and vitality if possible and to this end began to treat her myself. To my great relief her system has been toned up, her strength restored, her health completely recovered and wholly by the use of Warner's Tonic, invigorator and stomach remedy that has ever been discovered. I was led to use it the more readily as I had tested the health-restoring properties of Warner's Safe Cure in my own person and I therefore knew that any remedy Mr. Warner might produce would be a valuable one. I have since recommended both Warner's Tonic and Warner's Safe Cure to many of my friends and I know several Doctors of Divinity as well as numerous laymen who are using both with great benefit.

If all the overworked and duty-driven women of America could know of the experience above described, and act upon the same, there can be little doubt that much of the pain, and most of the depressing influences of life might be avoided. Such truths are too valuable to remain unknown.

A good addition to soup is made by cutting bread into little squares and frying them in butter till they are browned on every side. About three minutes before the soup is taken from the fire add the bread, so that it will be flavored with the soup, but will not be soaked so it will crumble.

Baltimore Markets—June 16.

Flour.—The demand is mostly for the medium and low grades, and the market is steady. We quote Howard Street and Western Super, \$3.75@3.50; do. do. Extra, \$3.50@4.50; do. do. Family, \$4.50@5.75; City Mills Super, \$3.50@3.50; do. Extra, \$3.50@4.50; do. (Rio brands) Extra, \$3.50@5.75; Baltimore Winter Wheat Patent, \$6.75; do. High-grade Family, \$6.25; do. 2d-grade Extra, \$5; do. Third-Grade Extra, \$5.25; Fine, \$2.50@2.75; Rye Flour, \$3.50@3.75; Corn Meal V 10 \$1.50; Collier's Excelsior Graham, \$1.

Wheat.—The few small lots of Southern arriving meet with a fair demand, and the market is quiet and steady with sales at \$1.08 for common, \$1.08 for choice Fultz, and \$1.08@1.08 for good to prime mixed. The market for Western opened a fraction lower, ruled quiet but fairly steady, and closed dull. The closing quotations were at \$1.00 1/2 @ \$1.00 3/4 for spot, \$1.00 1/2 for June, \$1.00 1/2 @ \$1.01 1/4 for July and \$1.01 1/2 @ \$1.01 1/4 for August.

Corn.—The market for Southern is firm and higher under a brisk demand. Choice white sold at 75 cts. for small lots at depot and 75 cts. for a cargo aboard. Prime yellow brought 74 1/2 cts. Trading in Western is slow and the market is dull but nominally steady. The closing prices were 50 1/2 cts. for spot, 50 1/2 cts. for June, 50 1/2 @ 50 1/2 cts. for July, and 51 1/2 @ 51 1/2 cts. for August.

Oats.—There is some inquiry, but buyers are not disposed to meet holders' extreme views, and the market is quiet. We quote Maryland and Pennsylvania at 37 @ 39 cts.; mixed Western, 36 @ 37 cts.; white do., 35 @ 36 cts.

Cotton.—Speculation is weak and lower and the market for spot is easy in sympathy, but there is no pressure to sell and quotations are unchanged. We quote as follows: Middling at 11 1/2 cts., low middling at 11 1/4 cts., and good ordinary 10 3/4 cts.

Hay and straw.—Only prime Hay is in demand and the market generally is quiet but steady. We quote baled Hay as follows: Cecil-county Timothy at \$16@17 1/2 ton; Maryland and Pennsylvania do., 12@15; do. mixed, 9@12; Western common to fair, \$10@13; do. good to choice, \$13@16; New York stock is selling at \$13@16 per ton. Straw is steady at \$7@8 for Wheat, \$10@11 for Oat, \$12 for long Rye and \$10@11 1/2 for short do.

Mill Feed.—Under an ample offering the market is quiet but steady. Western bran is quoted at \$14 1/2 ton, and City Mills Middlings at \$12 1/2 ton.

Provisions.—The general market is quiet and fairly steady. A fair order trade is reported at unchanged prices. Packed loaves from stores are quoted as follows: Bulk shoulders, 7 1/2 cts.; clear-rib sides, 9 1/2 cts.; bacon shoulders, 8 cts.; clear-rib sides, 10 1/2 cts.; Hams, sugar-cured, 14 1/2 @ 15 1/2 cts. Refined Lard, in tierces, 9 1/2 cts. Mess Pork, \$17 1/2 bbl. for new.

Butter.—Quite a fair demand is reported for strictly choice stock, and for such the market is steady, but medium and low grades are entirely neglected. We quote choice New York State at 16 @ 21 cts.; fresh Western packed choice at 15 cts.; do. good to prime at 13 @ 14 cts., and near-by receipts at 11 @ 15 cts. V B.

Eggs.—Under moderate arrivals the market is firm at 17 1/2 @ 18 cts. V dozen for fresh lots with quite a good demand.

Tobacco—Leaf.—The receipts of Maryland are small, and the market is rather quiet, though firm, especially for the good grades. We quote Maryland inferior frosted \$3@3; do. sound common, \$3.50@5; good common, \$5.50@6.50; do. middling, \$7@8.50; do. do. good fine red, \$8.50@11; do. fancy, \$13@14; upper country, \$15@16; do. ground leaves, \$3@8. Ohio, inferior to good common, \$4@9; greenish and brown, \$5@7.50; do. medium to fine red, \$7@10; common to medium spangled, \$7@10; do. fine spangled and yellow, \$11@12; do. air-cured medium to fine, \$6@14.

Live Stock—Beef Cattle.—Fairly active. Prices of Beef Cattle ranged as follows: Best, \$6.35@6.87 1/2; that generally rated first quality \$5.50@6.25; medium or good fair quality, \$4.25@5.25; ordinary thin Steers, Oxen and Cows, \$3.50@4. Extreme range of prices, \$3.50@6.87 1/2. Most of the sales were from \$4.75@5.25 per 100 lbs.

Swine.—Supply fully equal to a rather moderate demand, there being no activity in the market. We quote at 6 1/2 @ 7 cts. for common Hogs, 7 1/2 @ 7 3/4 cts. per lb. net for better grades, and extra a shade higher. **Sheep and Lambs.**—There was a fair demand. We quote butcher Sheep at 3 @ 5 cts., stock Sheep at 3 @ 4 cts., and Lambs at 5 @ 6 cts. per lb. gross.

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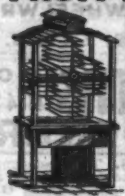
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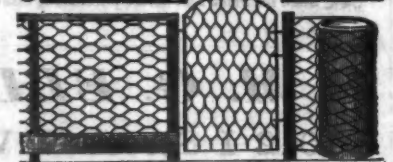
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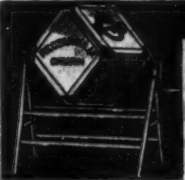
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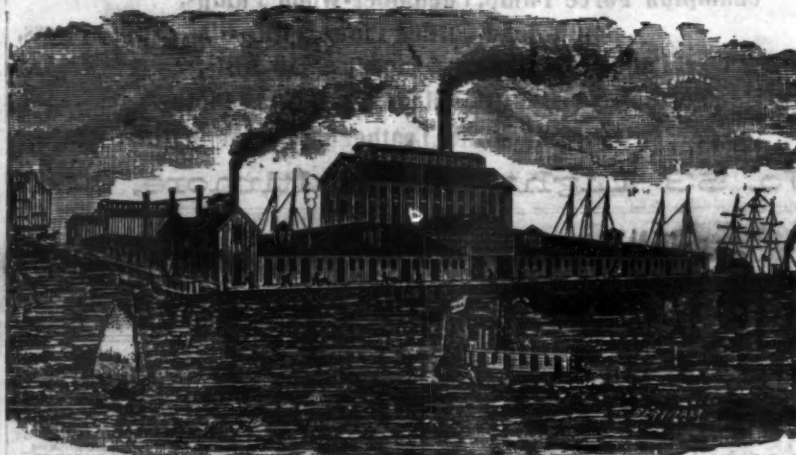
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